

claims

1-5. (canceled)

6. (new) Method of preparation of a fungal glucane hydrogel having antibacterial and immunostimulant activity by alkaline subsequent elimination of water-soluble components, characterized in that the obtained insoluble glucan is subsequently hydrated by wet grinding at a rotational speed of 3000 to 9000 rpm for 10 to 20 minutes to a swelling volume in water of 50 to 500 ml/g, and finally it is adjusted by heat sterilization at a temperature of 90 to 110 degrees C for 20 to 30 minutes, resulting in a gel which is formed by fungal polysaccharide with the β -(1,3)-D-bond in the principal chain, with a concentration of 0.5 to 3% by weight.

7. (new) The method according to claim 6 characterized in that the insoluble glucan is prepared from fruiting bodies of oyster mushroom (*Pleurotus ostreatus*).

8. (new) The method according to claim 6, characterized in that the resulting gel is formed by fungal polysaccharide with the β -(1,3)-D-bond branched at every fourth anhydroglucose unit.

9. (new) The method according to claim 7, characterized in that the resulting gel is formed by fungal polysaccharide with the β -(1,3)-D-bond branched at every fourth anhydroglucose unit.

10. (new) The method according to claim 6, characterized in that the resulting fungal glucane hydrogel is chemically sterilized by addition of 0.02 % of benzoic acid.

11. (new) The method according to claim 7, characterized in that the resulting fungal glucane hydrogel is chemically sterilized by addition of 0.02 % of benzoic acid.

12. (new) The method according to claim 8, characterized in that the resulting fungal glucane hydrogel is chemically sterilized by addition of 0.02 % of benzoic acid.

13. (new) The method according to claim 9, characterized in that the resulting fungal glucane hydrogel is chemically sterilized by addition of 0.02 % of benzoic acid.

14. (new) The use of fungal glucane hydrogel according to claim 6 for preparation of cosmetic, pharmaceutical and foodstuff products.

15. (new) The use of fungal glucane hydrogel according to claim 7 for preparation of cosmetic, pharmaceutical and foodstuff products.

16. (new) The use of fungal glucane hydrogel according to claim 8 for preparation of cosmetic, pharmaceutical and foodstuff products.

17. (new) The use of fungal glucane hydrogel according to claim 10 for preparation of cosmetic, pharmaceutical and foodstuff products.